The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1- 27 (Cancelled)

28. (New) A method of providing services of an application comprising:

 providing a plurality of network interfaces;

 providing a plurality of CPU's;

 running an instance of the application for each one of the plurality of network interfaces;

 designating a separate one of said plurality of CPU's to each instance; and

 binding a separate one of said plurality of network interfaces to each CPU, whereby each network interface is handled solely by the CPU to which that network interface is bound.

29. (New) A method as recited in claim 28, further comprising:

 assigning a separate network address to each one of the plurality of network interfaces.

30. (New) A method as recited in claim 29, wherein each separate network address is an Internet Protocol (IP) address.

31. (New) A method as recited in claim 29, wherein said step of running an instance of the application for each one of the plurality of network interfaces comprises:

 for each one of the plurality of network interfaces, initiating a listener that listens for the network address that is assigned to that network interface.

32. (New) A method as recited in claim 31, further comprising:

 providing a processing queue for each of the plurality of CPU's;

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assigning a separate one of the processing queues to each one of the plurality of CPUs, wherein the processing queue assigned to a particular CPU provides single threaded processing of data related to an instance of the application .

33. (New) A method as recited in claim 32 wherein each processing queue is a sequential queue (s-queue).

34. (New) A method as recited in claim 32, wherein each single threaded processing is uninterrupted while processing the data related to an instance of the application.

35. (New) A method as recited in claim 33, further comprising:

receiving data packets;

processing each data packet to determine a particular one of the processing queues corresponding to connection classifier information in the data packet; and

routing the data packet to the determined processing queue.

36. (New) A method as recited in claim 35, further comprising:

processing the packet by the determined processing queue.

37. (New) A method as recited in claim 36, further comprising:

if the determined processing queue is busy, waiting before the step of processing the packet by the determined processing queue.

38. (New) A method as recited in claim 28, wherein the step of running an instance of the application for each one of the plurality of network interfaces and the step of designating a separate one of said plurality of CPU's to each instance is performed automatically by an operating system.

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39.   (New) A computer system configured to provide services of an application comprising:

a plurality of network interfaces;

a plurality of CPU's, wherein each separate CPU has bound to it a separate one of said plurality of network interfaces,

in an application layer, a running instance of the application for each one of the plurality of network interfaces, wherein a separate one of said plurality of CPU's is designated to each instance; and

whereby each network interface is handled solely by the CPU to which that network interface is bound.

40.   (New) A computer system as in claim 39, wherein:

a separate network address is assigned to each one of the plurality of network interfaces.

41.   (New) A computer system as in claim 40, wherein each separate network address is an Internet Protocol (IP) address.

42.   (New) A computer system as in claim 40, wherein said running instance of the application for each one of the plurality of network interfaces includes a listener that listens for the network address that is assigned to that network interface.

43.   (New) A computer system as in claim 42, further comprising:

a processing queue for each of the plurality of CPU's, wherein a separate one of the processing queues is assigned to each one of the plurality of CPUs, wherein the processing queue assigned to a particular CPU is configured to provide single threaded processing of data related to an instance of the application.

44.   (New) A computer system as in claim 43, wherein each processing queue is a sequential queue (s-queue).

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45.   (New) A computer system as in claim 43, wherein each single threaded processing is configured to be uninterrupted while processing the data related to an instance of the application.

46.   (New) A computer system as in claim 44, further configured to:

receive data packets;

process each data packet to determine a particular one of the processing queues corresponding to connection classifier information in the data packet; and

route the data packet to the determined processing queue.

47.   (New) The computer system as in claim 46, further configured to:

process the packet by the determined processing queue.

48.   (New) The computer system as in claim 47, further configured to:

if the determined processing queue is busy, wait before processing the packet by the determined processing queue.

49.   (New) A computer system as in claim 39, wherein the computer system is configured such that running instances of the applications network interfaces and designating a separate one of said plurality of CPU's to each instance is performed automatically by an operating system.

50.   (New) A computer system comprising:

a plurality of instances of an application;

a plurality of CPU's, each CPU configured to process a separate one of said plurality of instances;

a plurality of network interfaces for a plurality of network connections to said computer system;

an operating system, wherein said operating system is configured to:

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automatically designate a separate CPU for processing each separate one of said instances of said application; and

automatically designate each of the plurality of network interfaces to one of the plurality of CPU's, thereby assigning each one of the network interfaces to an instance of said application.

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